

WHAT IS CLAIMED IS:

1. A voice synthesizing apparatus for converting text data into a synthetic voice and outputting it, characterized by:

5 voice waveform generating means for generating the voice waveform of said text data;

overlap detecting means for detecting the overlap of the voice outputs of a plurality of said text data; and

10 voice output means for voice-synthesizing and outputting the voice waveforms generated from said text data of which the overlap has been detected in different volumes.

15 2. A voice synthesizing apparatus according to Claim 1, characterized in that said voice output means determines the volume of the synthetic voice concerned with said plurality of text data on the basis of the priority of said plurality of text data.

20 3. A voice synthesizing apparatus according to Claim 2, characterized by the provision of importance setting means for setting the importance of said plurality of text data.

25 4. A voice synthesizing apparatus according to Claim 3, characterized in that said importance can have

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its desired level selected from among a plurality of preset levels.

5. A voice synthesizing apparatus according to  
5 Claim 3 or 4, characterized by the provision of display means and display control means for controlling said display means so as to display a setting screen for setting said importance in response to the output of said overlap detecting means.

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6. A voice synthesizing apparatus according to  
Claim 2, characterized by the provision of receiving means for receiving said plurality of text data and priority data indicative of the priority of said  
15 plurality of text data from the outside of the apparatus.

7. A voice synthesizing apparatus according to  
Claim 1, characterized in that when two voices overlap  
20 each other, said voice output means makes the rate of the volume of one voice into  $a/(a+b)$  and makes the rate of the volume of the other voice into  $b/(a+b)$  (a: a parameter concerned with the importance of said one voice, b: a parameter concerned with the importance of  
25 said other voice).

8. A voice synthesizing apparatus according to

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Claim 1, characterized in that when three or more voices overlap one another, said voice output means makes the rate of the volume of each output voice into a value obtained by dividing the value of an importance parameter concerned with the importance of said voice by the sum total of the importance parameters of all voices outputted in overlapping relation with one another.

9. A voice synthesizing apparatus according to Claim 1, characterized in that said voice output means is capable of effecting the setting of allotting a particularly great volume to the text data of particularly high importance.

10. A voice synthesizing system provided with a voice synthesizing apparatus for converting text data into a synthetic voice and outputting it, and an information processing apparatus for transmitting said text data to said voice synthesizing apparatus, characterized in that said voice synthesizing apparatus has:

voice waveform generating means for generating the voice waveform of said text data transmitted from said information processing apparatus;

overlap detecting means for detecting the overlap of the voice outputs of a plurality of said text data;

and

voice output means for voice-synthesizing and  
outputting the voice waveforms generated from said text  
data of which said overlap has been detected in  
5 different volumes.

11. A voice synthesizing system according to  
Claim 10, characterized in that said voice output means  
of said voice synthesizing apparatus determines the  
10 volumes of the synthetic voices concerned with said  
plurality of text data on the basis of the priority of  
said plurality of text data.

12. A voice synthesizing system according to  
15 claim 11, characterized in that said voice synthesizing  
apparatus is provided with importance setting means for  
setting the importance of said plurality of text data.

13. A voice synthesizing system according to  
20 Claim 12, characterized in that said importance can  
have its desired level selected from among a plurality  
of preset levels.

14. A voice synthesizing system according to  
25 Claim 12 or 13, characterized in that said voice  
synthesizing apparatus is provided with display means  
and display control means for controlling said display

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means so as to display a setting screen for setting said importance in response to the output of said overlap detecting means.

5           15. A voice synthesizing system according to Claim 11, characterized in that said voice synthesizing apparatus is provided with receiving means for receiving said plurality of text data and priority data indicative of the priority of said plurality of text  
10 data from the outside of the apparatus.

15           16. A voice synthesizing system according to Claim 10, characterized in that when two voices overlap each other, said voice output means of said voice synthesizing apparatus makes the rate of the volume of one voice into  $a/(a+b)$  and makes the rate of the volume of the other voice into  $b/(a+b)$  (a: a parameter concerned with the importance of said one voice, b: a  
20 parameter concerned with the importance of said other voice).

25           17. A voice synthesizing system according to Claim 10, characterized in that when three or more voices overlap one another, said voice output means of said voice synthesizing apparatus makes the rate of the volume of each output voice into a value obtained by dividing the value of an importance parameter concerned

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with the importance of said voice by the sum total of the importance parameters of all voices outputted in overlapping relationship with one another.

5           18. A voice synthesizing system according to Claim 10, characterized in that said voice output means of said voice synthesizing apparatus is capable of effecting the setting of allotting a particularly great volume to the text data of particularly high  
10 importance.

          19. A voice synthesizing method applied to a voice synthesizing apparatus for converting text data into a synthetic voice and outputting it, characterized  
15 by the voice waveform generating step of generating the voice waveform of said text data, the overlap detecting step of detecting the overlap of the voice outputs of a plurality of said text data, and the voice outputting step of voice-synthesizing and outputting the voice  
20 waveforms generated from said text data of which said overlap has been detected in different volumes.

          20. A voice synthesizing method according to Claim 19, characterized in that at said voice  
25 outputting step, the volumes of the synthetic voices concerned with said plurality of text data are determined on the basis of the priority of said

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plurality of text data.

21. A voice synthesizing method according to  
Claim 20, characterized by the provision of the  
5 importance setting step of setting the importance of  
said plurality of text data.

22. A voice synthesizing method according to  
Claim 21, characterized in that said importance can  
10 have its desired level selected from among a plurality  
of preset levels.

23. A voice synthesizing method according to  
Claim 21 or 22, characterized by the provision of the  
15 displaying step and the display controlling step of  
controlling said displaying step so as to display a  
setting screen for setting said importance in response  
to said overlap detecting step.

20 24. A voice synthesizing method according to  
Claim 20, characterized by the receiving step of  
receiving said plurality of text data and priority data  
indicative of the priority of said plurality of text  
data from the outside of the apparatus.

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25. A voice synthesizing method according to  
Claim 19, characterized in that when two voices overlap

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each other, said voice outputting step makes the rate of the volume of one voice into  $a/(a+b)$  and makes the rate of the volume of the other voice into  $b/(a+b)$  (a: a parameter concerned with the importance of said one voice, b: a parameter concerned with the importance of said other voice).

26. A voice synthesizing method according to Claim 19, characterized in that when three or more voices overlap one another, said voice outputting step makes the rate of the volume of each output voice into a value obtained by dividing the value of an importance parameter concerned with the importance of said voice by the sum total of the importance parameters of all voices outputted in overlapping relationship with one another.

27. A voice synthesizing method according to Claim 19, characterized in that said voice outputting step is capable of effecting the setting of allotting a particularly great volume to the text data of particularly high importance.

28. A storage medium storing therein a control program for making a computer realize a voice synthesizing method according to any one of Claims 19 to 27.

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29. A control program for making a computer realize a voice synthesizing method according to any one of Claims 19 to 27.

5           30. A voice synthesizing apparatus for converting text data into a synthetic voice and outputting it, characterized by the provision of voice synthesizing means for generating the synthetic voices of a plurality of said text data in accordance with the  
10 priority of said plurality of text data and outputting them at a time.

          31. A voice synthesizing apparatus according to Claim 30, characterized in that said voice synthesizing  
15 means sets the volume of the synthetic voice of each of the text data in accordance with the priority of said plurality of text data.

          32. A voice synthesizing apparatus according to  
20 Claim 30, characterized by the provision of importance setting means for setting importance for said plurality of text data.

          33. A voice synthesizing apparatus according to  
25 Claim 30, characterized by the provision of receiving means for receiving said plurality of text data and priority data indicative of the priority of said

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plurality of text data from the outside of the apparatus.

34. A voice synthesizing apparatus for converting  
5 text data into a synthetic voice and outputting it,  
characterized by the provision of voice waveform  
generating means for generating the voice waveform of  
said text data, and voice output means for voice-  
synthesizing the voice waveforms generated from said  
10 plurality of text data in different volumes and  
outputting them at a time.

35. A voice synthesizing apparatus according to  
claim 34, characterized in that said voice output means  
15 sets the volume of the synthetic voice of each of the  
text data in accordance with the priority of said  
plurality of text data.

36. A voice synthesizing apparatus according to  
20 Claim 34, characterized by the provision of importance  
setting means for setting the importance for said  
plurality of text data.

37. A voice synthesizing apparatus according to  
25 Claim 34, characterized by the provision of receiving  
means for receiving said plurality of text data and  
priority data indicative of the priority of said

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plurality of text data from the outside of the apparatus.

38. A voice synthesizing method applied to a  
5 voice synthesizing apparatus for converting text data  
into a synthetic voice and outputting it, characterized  
by the voice outputting step of generating synthetic  
voices of a plurality of said text data in accordance  
with the priority of said plurality of text data and  
10 outputting them at a time.

39. A voice synthesizing method according to  
Claim 38, characterized in that at said voice  
outputting step, the volume of the synthetic voice of  
15 each of the text data is set in accordance with the  
priority of said plurality of text data.

40. A voice synthesizing method according to  
Claim 38, characterized by the importance setting step  
20 of setting the importance for said plurality of text  
data.

41. A voice synthesizing method according to  
Claim 38, characterized by the receiving step of  
25 receiving said plurality of text data and priority data  
indicative of the priority of said plurality of text  
data from the outside of the apparatus.

42. A voice synthesizing method applied to a voice synthesizing apparatus for converting text data into a synthetic voice and outputting it, characterized by the voice waveform generating step of generating the voice waveforms of said text data, and the voice outputting step of voice-synthesizing the voice waveforms generated from said plurality of text data in different volumes and outputting them at a time.

43. A voice synthesizing method according to Claim 42, characterized in that at said voice outputting step, the volume of the synthetic voice of each of the text data is set in accordance with the priority of said plurality of text data.

44. A voice synthesizing method according to Claim 42, characterized by the importance setting step of setting the importance for said plurality of text data.

45. A voice synthesizing method according to Claim 42, characterized by the receiving step of receiving said plurality of text data and priority data indicative of the priority of said plurality of text data from the outside of the apparatus.

46. A storage medium storing therein a control

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program for making a computer realize a voice synthesizing method according to any one of Claims 38 to 41.

5           47. A control program for making a computer realize a voice synthesizing method according to any one of Claims 38 to 41.

10           48. A storage medium storing therein a control program for making a computer realize a voice synthesizing method according to any one of Claims 42 to 45.

15           49. A control program for making a computer realize a voice synthesizing method according to any one of Claims 42 to 45.

20           50. A voice synthesizing apparatus for converting text data into a synthetic voice and outputting it, characterized by:

voice waveform generating means for generating the voice waveform of said text data; and

25           voice output means for voice-synthesizing a plurality of said text data with different kinds of voices and outputting them.

51. A voice synthesizing apparatus according to

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Claim 50, characterized in that said different kinds of voices differ in frequency band from each other.

52. A voice synthesizing apparatus according to  
5 Claim 50, characterized in that said voice output means has a phoneme storing portion storing therein a plurality of kinds of pheneme data corresponding to said different kinds of voices, and a voice waveform generating portion for processing said phoneme data in  
10 accordance with processing parameters corresponding to said different kinds of voices, and generating synthetic voices.

53. A voice synthesizing apparatus according to  
15 Claim 52, characterized in that said processing parameters include at least one of a frequency band, a voice level and a voice speed.

54. A voice synthesizing apparatus according to  
20 Claim 50, characterized in that said different kinds of voices are voices corresponding to different sexes.

55. A voice synthesizing apparatus according to  
25 Claim 50, characterized by the provision of selecting means for selecting any of a predetermined number of kinds of voices, and in that said voice output means generates a synthetic voice in accordance with said

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selected voice and outputs it.

56. A voice synthesizing apparatus according to  
Claim 50, characterized in that said different kinds of  
5 voices differ in height from each other.

57. A voice synthesizing apparatus according to  
Claim 50, characterized in that said voice output means  
selectively outputs a predetermined number of kinds of  
10 voices in predetermined order.

58. A voice synthesizing apparatus according to  
Claim 50, characterized in that said different kinds of  
voices are voices corresponding to different ages.  
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59. A voice synthesizing apparatus for converting  
text data into a synthetic voice and outputting it,  
characterized by voice waveform generating means for  
generating the voice waveform of said text data, and  
20 voice output means for causing respective voices to be  
outputted from different uttering means when the  
overlapping of the voice outputs of a plurality of said  
text data is detected.

60. A voice synthesizing apparatus according to  
Claim 59, characterized by setting means capable of  
arbitrarily setting said uttering means used.  
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61. A voice synthesizing apparatus according to any one of Claims 50 to 60, characterized in that it is applicable to a system for making conversation by said text data through Internet.

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62. A voice synthesizing system provided with a voice output apparatus for converting text data into a synthetic voice and outputting it, and an external apparatus for transmitting said text data to said voice output apparatus, characterized in that said voice output apparatus has voice waveform generating means for generating the voice waveform of said text data, and voice output means for voice-synthesizing a plurality of said text data with different kinds of voices and outputting them.

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63. A voice synthesizing system according to Claim 62, characterized in that said different kinds of voices differ in frequency band from each other.

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64. A voice synthesizing system according to Claim 62, characterized in that said voice output means has a phoneme storing portion storing therein a plurality of kinds of phoneme data corresponding to said different kinds of voices, and a voice waveform generating portion for processing said phoneme data in accordance with processing parameters corresponding to

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said different kinds of voices, and generating a synthetic voice.

5           65. A voice synthesizing system according to  
Claim 64, characterized in that said processing  
parameters include at least one of a frequency band, a  
voice level and a voice speed.

10           66. A voice synthesizing system according to  
Claim 62, characterized in that said different kinds of  
voices are voices corresponding to different sexes.

15           67. A voice synthesizing system according to  
claim 62, characterized in that said voice output  
apparatus is provided with selecting means for  
selecting any of a predetermined number of kinds of  
voices, and said voice output means generates a  
synthetic voice in accordance with said selected voice  
and outputs it.

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          68. A voice synthesizing system according to  
Claim 62, characterized in that said different kinds of  
voices differ in height from each other.

25           69. A voice synthesizing system according to  
Claim 62, characterized in that said voice output means  
selectively outputs a predetermined number of kinds of

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voices in predetermined order.

70. A voice synthesizing system according to  
Claim 62, characterized in that said different kinds of  
5 voices are voices corresponding to different ages.

71. A voice synthesizing system provided with a  
voice output apparatus for converting text data into a  
synthetic voice and outputting it, and an external  
10 apparatus for transmitting said text data to said voice  
output apparatus, characterized in that said voice  
output apparatus has voice waveform generating means  
for generating the voice waveform of said text data,  
and voice output means for causing respective voices to  
15 be outputted from different uttering means when the  
overlapping of the voice outputs of a plurality of said  
text data is detected.

72. A voice synthesizing system according to  
20 Claim 71, characterized in that said voice output  
apparatus has setting means capable of arbitrarily  
setting said uttering means used.

73. A voice synthesizing system according to any  
25 one of Claims 61 to 71, characterized in that it is  
applicable to a system for making conversation by said  
text data through Internet.

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74. A voice synthesizing method applied to a voice output apparatus for converting text data into a synthetic voice and outputting it, characterized by the voice waveform generating step of generating the voice waveform of said text data, and the voice outputting step of voice-synthesizing a plurality of said text data with different kinds of voices and outputting them.

75. A voice synthesizing method according to Claim 74, characterized in that said different kinds of voices differ in frequency band from each other.

76. A voice synthesizing method according to Claim 74, characterized in that said voice outputting step has the phoneme storing step of storing a plurality of kinds of phoneme data corresponding to said different kinds of voices, and the voice waveform generating step of processing said phoneme data in accordance with processing parameters corresponding to said different kinds of voices, and generating a synthetic voice.

77. A voice synthesizing method according to Claim 74, characterized in that said processing parameters include at least one of a frequency band, a voice level and a voice speed.

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78. A voice synthesizing method according to Claim 74, characterized in that said different kinds of voices are voices corresponding to different sexes.

5           79. A voice synthesizing method according to Claim 74, characterized by the selecting step of selecting any of a predetermined number of kinds of voices, and in that at said voice outputting step, a synthetic voice is generated in accordance with said  
10           selected voice and outputted.

80. A voice synthesizing method according to Claim 74, characterized in that said different kinds of voices differ in height from each other.  
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81. A voice synthesizing method according to Claim 74, characterized in that at said voice outputting step, a predetermined number of kinds of voices are selectively outputted in predetermined  
20           order.

82. A voice synthesizing method according to Claim 74, characterized in that said different kinds of voices are voices corresponding to different ages.  
25

83. A voice synthesizing method applied to a voice synthesizing apparatus for converting text data

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into a synthetic voice and outputting it, characterized  
by the voice waveform generating step of generating the  
voice waveform of said text data, and the voice  
outputting step of causing respective voices to be  
5 outputted from different uttering means when the  
overlapping of the voice outputs of a plurality of said  
text data is detected.

84. A voice synthesizing method according to  
10 Claim 83, characterized by the setting step capable of  
arbitrarily setting said uttering means used.

85. A voice synthesizing method according to any  
one of Claims 74 to 84, characterized in that it is  
15 applicable to a system for making conversation by said  
text data through Internet.

86. A storage medium storing therein a control  
program for making a computer realize a voice  
20 synthesizing method according to any one of Claims 25  
to 33.

87. A control program for making a computer  
realize a voice synthesizing method according to any  
25 one of Claims 34 to 36.

88. A voice synthesizing apparatus for converting

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text data into a synthetic voice and outputting it,  
characterized by:

voice waveform generating means for generating the  
voice waveform of said text data; and

5 voice output means for upping the reproduction  
speed of the voice waveform and outputting the voice  
waveform when the overlap of the reproduction timing of  
the voice waveforms of a plurality of said text data is  
detected.

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89. A voice synthesizing apparatus according to  
Claim 88, characterized in that said voice output means  
outputs at a reproduction speed somewhat higher than an  
ordinary reproduction speed when at the present point  
15 of time, there is a voice waveform under voice  
reproduction and the number of voice waveforms waiting  
for voice reproduction is one, and outputs at still a  
higher speed when at the present point of time, there  
is a voice waveform under voice reproduction and the  
20 number of voice waveforms waiting for voice  
reproduction is two or more.

90. A voice synthesizing apparatus according to  
Claim 88, characterized in that it is possible for said  
25 voice output means to up the reproduction speed at fine  
steps conforming to the number of voice waveforms  
waiting for voice reproduction.

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91. A voice synthesizing apparatus for converting text data into a synthetic voice and outputting it, characterized by:

voice waveform generating means for generating the  
5 voice waveform of said text data; and

voice output means for providing, when voice waveforms concerned with a plurality of said text data are to be reproduced, a predetermined blank period after the termination of the reproduction of a  
10 preceding voice waveform and before the start of the reproduction of the next voice waveform.

92. A voice synthesizing apparatus according to Claim 91, characterized in that said blank period can  
15 be set arbitrarily.

93. A voice synthesizing apparatus for converting text data into a synthetic voice and outputting it, characterized by:

20 voice waveform generating means for generating the voice waveform of said text data; and

voice output means for reproducing, when voice waveforms concerned with a plurality of said text data are to be reproduced, a prepared specific voice  
25 synthesis waveform after the termination of the reproduction of a preceding voice waveform and before the start of the reproduction of the next voice

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waveform.

94. A voice synthesizing apparatus according to Claim 93, characterized in that said specific voice  
5 synthesis waveform is the voice synthesis waveform of a voice message which can be distinctly known as punctuation inserted between said preceding voice waveform and said next voice waveform.

10 95. A voice synthesizing apparatus according to any one of Claims 88 to 94, characterized in that it is applicable to a system for voice-broadcasting said text data in various facilities such as recreation grounds, and a system for making conversation by said text data  
15 through Internet.

96. A voice synthesizing system provided with a voice synthesizing apparatus for converting text data into a synthetic voice and outputting it, and an  
20 external apparatus for transmitting said text data to said voice synthesizing apparatus, characterized in that said voice synthesizing apparatus has voice waveform generating means for generating the voice waveform of said text data, and voice output means for  
25 upping the reproduction speed of the voice waveform and outputting the voice waveform when the overlap of the reproduction timing of the voice waveforms of a

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plurality of said text data is detected.

97. A voice synthesizing system according to Claim 96, characterized in that said voice output means  
5 of said voice synthesizing apparatus outputs at a reproduction speed somewhat higher than an ordinary reproduction speed when at the present point of time, there is a voice waveform under voice reproduction and the number of voice waveforms waiting for voice  
10 reproduction is one, and outputs at still a higher reproduction speed when at the present point of time, there is a voice waveform under voice reproduction and the number of voice waveforms waiting for voice reproduction is two or more.

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98. A voice synthesizing system according to Claim 96, characterized in that it is possible for said voice output means of said voice synthesizing apparatus to up the reproduction speed at fine steps conforming  
20 to the number of voice waveforms waiting for voice reproduction.

99. A voice synthesizing system provided with a voice synthesizing apparatus for converting text data  
25 into a synthetic voice, and an external apparatus for transmitting said text data to said voice synthesizing apparatus, characterized in that said voice

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synthesizing apparatus has voice waveform generating means for generating the voice waveform of said text data, and voice output means for providing, when voice waveforms concerned with a plurality of said text data are to be reproduced, a predetermined blank period after the termination of the reproduction of a preceding voice waveform and before the start of the reproduction of the next voice waveform.

100. A voice synthesizing system according to Claim 99, characterized in that said blank period can be set arbitrarily.

101. A voice synthesizing system provided with a voice synthesizing apparatus for converting text data into a synthetic voice and outputting it, and an external apparatus for transmitting said text data to said voice synthesizing apparatus, characterized in that said voice synthesizing apparatus has voice waveform generating means for generating the voice waveform of said text data, and voice output means for reproducing, when voice waveforms concerned with a plurality of said text data are to be reproduced, a prepared specific voice synthesis waveform after the termination of the reproduction of a preceding voice waveform and before the start of the reproduction of the next voice waveform.

102. A voice synthesizing system according to Claim 101, characterized in that said specific voice synthesis waveform is the voice synthesis waveform of a voice message which can be distinctly known as punctuation inserted between said preceding voice waveform and said next voice waveform.

103. A voice synthesizing system according to any one of Claims 96 to 102, characterized in that it is applicable to a system for voice-broadcasting said text data in various facilities such as recreation grounds, and a system for making conversation by said text data through Internet.

104. A voice synthesizing method applied to a voice synthesizing apparatus for converting text data into a synthetic voice and outputting it, characterized by the voice waveform generating step of generating the voice waveform of said text data, and the voice outputting step of upping the reproduction speed of the voice waveform and outputting the voice waveform when the overlap of the reproduction timing of the voice waveforms of a plurality of said text data is detected.

105. A voice synthesizing method according to Claim 104, characterized in that at said voice outputting step, the voice waveform is outputted at a

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reproduction speed somewhat higher than an ordinary reproduction speed when at the present point of time, there is a voice waveform under voice reproduction and the number of voice waveforms waiting for voice reproduction is one, and the voice waveform is outputted at still a higher speed when at the present point of time, there is a voice waveform under voice reproduction and the number of voice waveforms waiting for voice reproduction is two or more.

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106. A voice synthesizing method according to Claim 104, characterized in that at said voice outputting step, it is possible to up the reproduction speed at fine steps conforming to the number of voice waveforms waiting for voice reproduction.

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107. A voice synthesizing method applied to a voice synthesizing apparatus for converting text data into a synthetic voice and outputting it, characterized by the voice waveform generating step of generating the voice waveform of said text data, and the voice outputting step of providing, when voice waveforms concerned with a plurality of said text data are to be reproduced, a predetermined blank period after the termination of the reproduction of a preceding voice waveform and before the start of the reproduction of the next voice waveform.

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108. A voice synthesizing method according to Claim 107, characterized in that said blank period can be set arbitrarily.

5           109. A voice synthesizing method applied to a voice synthesizing apparatus for converting text data into a synthetic voice and outputting it, characterized by the voice waveform generating step of generating the voice waveform of said text data, and the voice  
10           outputting step of reproducing, when voice waveforms concerned with a plurality of said text data are to be reproduced, a prepared specific voice synthesis waveform after the termination of the reproduction of a preceding voice waveform and before the start of the  
15           reproduction of the next voice waveform.

          110. A voice synthesizing method according to Claim 109, characterized in that said specific voice synthesis waveform is the voice synthesis waveform of a  
20           voice message which can be distinctly known as punctuation inserted between said preceding voice waveform and said next voice waveform.

          111. A voice synthesizing method according to any  
25           one of Claim 103 to 109, characterized in that it is applicable to a system for voice-broadcasting said text data in various facilities such as recreation grounds,

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and a system for making conversation by said text data through Internet.

112. A storage medium storing therein a control  
5 program for making a computer realize a voice synthesizing method according to any one of Claims 17 to 19.

113. A control program for making a computer  
10 realize a voice synthesizing method according to any one of Claims 17 to 19.

114. A storage medium storing therein a control  
15 program for making a computer realize a voice synthesizing method according to Claim 20 or 21.

115. A control program for making a computer  
realize a voice synthesizing method according to Claim  
20 20 or 21.

116. A storage medium storing therein a control  
program for making a computer realize a voice  
synthesizing method according to any one of Claims 22  
to 24.

117. A control program for making a computer  
realize a voice synthesizing method according to any

one of Claims 22 to 24.

118. A voice synthesizing apparatus for  
converting text data into a synthetic voice and  
5 outputting it, characterized by the provision of:  
input means for inputting said text data;  
voice waveform generating means for generating the  
voice waveform of said text data;  
voice output means for outputting a voice  
10 concerned with said voice waveform; and  
control means for controlling, when a voice  
waveform by the inputting of second said text data is  
detected during the outputting of a voice concerned  
with first said text data, said voice output means so  
15 as to output a voice concerned with said second text  
data after the outputting of a voice concerned with  
said first text data has been terminated.

119. A voice synthesizing apparatus according to  
20 Claim 118, characterized in that said control means  
controls said voice output means so as to make the  
reproduction speed of a voice waveform concerned with  
said first text data higher than an ordinary speed in  
conformity with the detection of a voice waveform by  
25 said second text data.

120. A voice synthesizing apparatus according to

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Claim 118, characterized in that said control means  
controls said voice output means so as to start the  
outputting of a voice concerned with said second text  
data after a predetermined period has elapsed after the  
5 termination of the outputting of a voice concerned with  
said first text data.

121. A voice synthesizing apparatus according to  
Claim 118, characterized in that said control means  
10 controls said voice output means so as to output a  
predetermined voice after the termination of the  
outputting of the voice concerned with said first text  
data, and thereafter output the voice concerned with  
said second text data.

122. A voice synthesizing apparatus according to  
Claim 118, characterized in that said control means  
outputs the voice concerned with said first text data  
and the voice concerned with said second text data at  
15 an ordinary reproduction speed.

123. A voice synthesizing apparatus according to  
Claim 118, characterized by the provision of storage  
means for storing therein voice waveform data generated  
25 by said voice waveform generating means, and in that  
said control means controls said voice output means so  
as to change the reproduction speed of said voice

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waveform in conformity with the number of the voice waveform data conforming to said inputted text data stored in said storage means.

5           124. A voice synthesizing method applied to a voice synthesizing apparatus for converting text data into a synthetic voice and outputting it, characterized by:

10           the inputting step of inputting said text data;  
the voice waveform generating step of generating the voice waveform of said text data;

the voice outputting step of outputting a voice concerned with said voice waveform; and

15           the controlling step of controlling, when the voice waveform by the inputting of second said text data is detected during the outputting of a voice concerned with first said text data, said voice outputting step so as to output a voice concerned with said second text data after the outputting of the voice  
20           concerned with said first text data is terminated.

125. A voice synthesizing method according to Claim 124, characterized in that at said controlling step, said voice outputting step is controlled so as to  
25           make the reproduction speed of a voice waveform concerned with said first text data higher than an ordinary speed in conformity with the detection of a

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voice waveform by said second text data.

126. A voice synthesizing method according to  
Claim 124, characterized in that at said controlling  
5 step, said voice outputting step is controlled so as to  
start the outputting of the voice concerned with said  
second text data after a predetermined period has  
elapsed after the termination of the outputting of the  
voice concerned with said first text data.

10

127. A voice synthesizing method according to  
Claim 124, characterized in that at said controlling  
step, said voice outputting step is controlled so as to  
output the voice concerned with said second text data  
15 after a predetermined voice has been outputted after  
the outputting of the voice concerned with said first  
text data.

128. A voice synthesizing method according to  
20 Claim 124, characterized in that at said controlling  
step, the voice concerned with said first text data and  
the voice concerned with said second text data are  
outputted at an ordinary reproduction speed.

129. A voice synthesizing method according to  
25 Claim 124, characterized by the storing step of storing  
voice waveform data generated by said voice waveform

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generating step, and in that at said controlling step,  
said voice outputting step is controlled so as to  
change the reproduction speed of said voice waveform in  
conformity with the number of the voice waveform data  
5 conforming to said inputted text data stored at said  
storing step.

130. A storage medium storing therein a control  
program for making a computer realize a voice  
10 synthesizing method according to any one of Claims 124  
to 129.

131. A control program for making a computer  
realize a voice synthesizing method according to any  
15 one of Claims 124 to 129.

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